Discuss the following topics on Java Database Programming. Select at least **one** of the following topics for your initial post.

* Batch Processing.
* Scrollable and Undated ResultSet.
* Scrollable and Undated RowSet.
* Storing and Retrieving Images in JDBC.

As we have previously learned, JDBC, also known as Java Database Connectivity, is an API used to communicate or connect with a database while retrieving data from the database or even updating it. It does this through SQL queries and uses interfaces to help make the progress possible. It is a very powerful tool and acts as a bridge between different programming languages. Part of the capabilities of JDBC allows for a scrollable and updated ResultSet.

The ResultSet is a vital part of database connectivity (GeeksforGeeks, 2024). ResultSet is an object that "represents the result of a SQL Query executed on a database" (GeeksforGeeks, 2024). It helps to navigate through the resulting data and update it as needed (GeeksforGeeks, 2024). The ResultSet can be thought of as a spreadsheet or table with rows representing records and columns representing database fields (GeeksforGeeks, 2024). A ResultSet goes through each row and can be brought to a specific row using a method such as next() (GeeksforGeeks, 2024). Data can be updated using ResultSet through different methods such as "updateInt(int columnIndex, int x), updateString(int columnIndex, String x), updateBoolean(int columnIndex, boolean x), updateRow(), and deleteRow()" (GeeksforGeeks, 2024).

There are three types of ResultSet: scrollability, concurrency, and holdability (GeeksforGeeks, 2024). Scrollability is what allows the cursor in ResultSet to move around as commanded (GeeksforGeeks, 2024). It can move forward through rows by using TYPE\_FORWARD\_ONLY, scroll forward and backward, but not "reflect ResultSet" using TYPE\_SCROLL\_INSENSITIVE, and move forward and backward, but changes the ResultSet using TYPE\_SCROLL\_SENSITIVE (GeeksforGeeks, 2024).

**Reference**

GeeksforGeeks. (2024, May 27). *JDBC Result Set*. GeeksforGeeks. https://www.geeksforgeeks.org/jdbc-result-set/

**Assignment Requirements and Grading:**

* 1. An initial post of approximately 250 words is due by **Thursday, 11:59 p.m., CST**.
  2. For the initial post to be considered substantive, it should be at least 250 words in length and fully cover the topics being presented. Single-sentence definitions or responses will not be awarded points.
  3. Submit your post by clicking on the assignment link above, then Create Thread. You must create a thread in order to view your peers' posts. Tip: Create your post in a Word document and then copy and paste your work into the thread.
  4. A minimum of three (3) responses, to the original threads of other students, of 100-200 words each are due by **Sunday, 11:59 p.m., CST**.
  5. To view the rubric grading criteria, click on the following link: [Discussion Board Grading Rubric.](https://content.bellevue.edu/cst/csd/rubricdbv3.pdf)